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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,493	10/18/2001	Kuen-Yuan Hwang	56629 (71987)	7476

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EDWARDS & ANGELL, LLP  
P.O. BOX 9169  
BOSTON, MA 02209

EXAMINER

DELCOTTO, GREGORY R

ART UNIT	PAPER NUMBER
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1751

DATE MAILED: 04/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/982,493

Applicant(s)

HWANG ET AL.

Examiner

Gregory R. Del Cotto

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

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### DETAILED ACTION

1. Claims 1-26 are pending. The preliminary amendment filed 12/26/01 has been entered.

#### *Priority*

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-26 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

With respect to claims 1 and 14, the specification, as originally filed, provides no basis for the composition comprising 30 to 60% of a thermosetting resin "**consisting** of 40 to 70% by weight of at least one methylool-containing amino resin" as recited by instant claims 1 and 14. Note that, the specification does provide basis for an amino resin composition comprising 30 to 60% of a thermosetting resin and 40 to 70% by weight of at least one methylool-containing amino resin as stated in original claim 1 and page 5, lines 1-10 of the instant specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-26 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to instant claims 1 and 14, these claims are vague and indefinite in that it is unclear how the thermoset resin can "consist" of 40 to 70% of at least one methylol-containing amino resin without an additional component to make the total add to 100%. Consisting of excludes all other components and it is unclear how the balance can ever be 100%. Clarification is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an

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international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1, 2, 14, and 15 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Farkas et al (US 4,785,073).

Farkas et al teach a series of melamine-phenol-formaldehyde resoles for pressure-free to low pressure, low/medium temperature conversion into moulded product. The molar ratio of melamine:phenol is the range 1:4.7 to 1:0.29; for each mole of melamine there are 1.5 to 3 moles of formaldehyde and for each mole of phenol, there are 1.2 to 2 moles of formaldehyde. The resin compositions may contain fillers/reinforcing fibers, glycol and water, curing is at or near neutral pH and may be accelerated by the use of boric oxide or acid and also by microwave heating. See Abstract. The moulding compositions may contain fillers such zinc oxide, magnesium carbonate, magnesium hydroxide, clays, mica, talc, silica, etc. The resin system may also contain reinforcing fibres such as glass, nylon, cellulose, etc. See column 4, lines 12-40.

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Curing, after shaping, of the moulding compositions may take place in closed or open heated moulds, with or without the application of pressure. Alternatively, curing may take place by stoving the shaped article in a thermostatically-controlled circulating air oven, or by means of microwave or high frequency.

Specifically, Farkas et al teach melamine-phenol-formaldehyde resole of molar ratios melamine-phenol-formaldehyde 1.0:3.4:8.4 containing 10% by weight of dipropylene glycol and approximately 15% by weight of water: 100 parts by weight dipropylene glycol:12 parts by weight water:10 parts by weight pH adjusted to 6.0 with butyl acid phosphate. See column 6, lines 60-69.

Accordingly, the broad teachings of Farkas et al anticipate the material limitations of the instant claims.

Alternatively, even if the broad teachings of Farkas et al are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art to arrive at the claimed solids content of composition in order to provide the optimum properties to the composition since Farkas et al teach that the amount of melamine, phenol, and formaldehyde added to the composition may be varied.

Claims 3-13 and 16-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farkas et al (US 4,785,073).

Farkas et al are relied upon as set forth above. However, Farkas et al do not specifically teach a composition having the specific shape containing a thermoset resin, a methylol containing resin having the specific solids content,

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and the other requisite components of the composition in the specific proportions as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a composition having the specific shape containing a thermoset resin, a methylool containing resin having the specific solids content, and the other requisite components of the composition in the specific proportions as recited by the instant claims, with a reasonable expectation of success and similar results with respect to other disclosed components, because the broad teaching of Farkas et al suggest a composition having the specific shape containing a thermoset resin, a methylool containing resin having the specific solids content, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

Claims 1, 2, 14, and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, under 35 USC 103(a) as obvious over Gunther et al (US 5,021,474).

Gunther et al teach moulding compositions comprising a melamine/formaldehyde resin, a melamine/phenol/formaldehyde resin or a mixture of said resins, organic and/or inorganic fillers, a lubricant, and 0.1 to 2% by weight, based on the total composition, of 3-chloro-1,2-propanediol as latent hardener are suitable for the production of mouldings by injection moulding. See Abstract. The moulding compositions preferably contain 35 to 70% by weight of the of the melamine resin based on the total weight of the composition. Suitable filler materials include would flour such as cellulose, calcium carbonate, alumina,

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silicates, glass beads, etc. See column 2, line 30 to column 3, line 15. Suitable lubricants include monohydric alcohols, polyhydric alcohols, etc. See column 3, lines 10-25.

Accordingly, the broad teachings of Gunther et al anticipate the material limitations of the instant claims.

Alternatively, even if the broad teachings of Gunther et al are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art to arrive at the claimed solids content of composition in order to provide the optimum properties to the composition since Gunther et al teach that the amount of melamine, phenol, and formaldehyde added to the composition may be varied.

Claims 3-13 and 16-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gunther et al (US 5,021,474)

Gunther et al are relied upon as set forth above. However, Gunther et al do not specifically teach a composition having the specific shape containing a thermoset resin, a methylol containing resin having the specific solids content, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to formulate a composition having the specific shape containing a thermoset resin, a methylol containing resin having the specific solids content, and the other requisite components of the composition in the specific proportions as recited by the instant claims, with a reasonable



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expectation of success and similar results with respect to other disclosed components, because the broad teaching of Gunther et al suggest a composition having the specific shape containing a thermoset resin, a methylol containing resin having the specific solids content, and the other requisite components of the composition in the specific proportions as recited by the instant claims.

Claims 1, 2, 10, 14, 15, and 23 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Schmidt-Hellerau et al (US 4,978,711).

Schmidt-Hellerau et al teach aqueous aminoresin solutions for low-formaldehyde surface bonding, based on condensates of melamine, urea, phenol and formaldehyde having a molar ratio ofr from 1.4 to 1.8 moles of formaldehyde, from 0.04 mole to 0.1 mole of melamine and from 0.015 to 0.04 mole of phenol per mole of urea, relative to the total amount of the aminoresin which are obtainable by mixing from 20 to 40% by weight of melamine/urea/phenol/formaldehyde condensate with from 60 to 80% by weight of a urea/formaldehyde condensate. See Abstract. The aminoresin mixture has a solids content of from 60 to 80. See column 2, lines 35-50.

Accordingly, the broad teachings of Schmidt-Hellerau et al anticipate the material limitations of the instant claims.

Alternatively, even if the broad teachings of Schmidt-Hellerau et al are not sufficient to anticipate the material limitations of the instant claims, it would have been nonetheless obvious to one of ordinary skill in the art to arrive at the claimed solids content of composition in order to provide the optimum properties

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to the composition since Schmidt-Hellerau et al teach that the amount of melamine, phenol, and formaldehyde added to the composition may be varied.

***Conclusion***

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Remaining references cited but not relied upon are considered to be cumulative to or less pertinent than those relied upon or discussed above.

Applicant is reminded that any evidence to be presented in accordance with 37 CFR 1.131 or 1.132 should be submitted before final rejection in order to be considered timely.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory R. Del Cotto whose telephone number is (703) 308-2519. The examiner can normally be reached on Mon. thru Fri. from 8:30 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (703) 308-4708. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

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Gregory R. Del Cotto  
Primary Examiner  
Art Unit 1751

GRD  
April 25, 2003